

January 28, 2000

# SPACE CENTER Roundup

VOL. 39, NO. 2 LYNDON B. JOHNSON SPACE CENTER, HOUSTON, TEXAS

## Engineers to raise awareness of engineering profession to local students

By Mae Mangieri

**N**ext month, 175 civil service and contractor employees will have the opportunity to elevate public awareness and appreciation of the engineering profession when they visit some 13,000 K-12 students and teachers in the local educational community as part of a national outreach program called Discover "E" ("E" for Engineering) during JSC's 9th annual National Engineers Week Program.

"Employees have signed up to provide an overwhelming 475 classroom presentations at more than 100 schools," said Nancy Robertson, chief of the Education and Community Support Branch in the Public Affairs Office. "This shows an impressive level of dedication to share their unique space-related experience to promote engineering careers."

Although National Engineers Week is February 20-26, JSC's program extends throughout the entire month of February to support the large number of requests for exhibit items and educational materials from the employees who will visit classrooms.

JSC's Public Affairs Office hosted four training sessions for civil service and contractor employees to bolster their confidence in providing effective classroom presentations. The training sessions included a panel of veteran JSC National Engineers Week volunteers who shared their tested classroom hands-on experiences.

"I like to talk about my field of interest – heat transfer," said Steve Rickman, deputy chief of the Thermal Branch in the Engineering Directorate. "One hands-on activity I use demonstrates the ability of different materials to conduct heat. We immerse four dissimilar rods in ice water and determine which one cools fastest. That leads to a discussion of why some materials are used for an application while others are not.



NASA JSC Photo JSC2000-00397 by Bill Stafford

JSC's National Engineers Week training members are from left, front: Robin Hart, Beverly Spiller and Mae Mangieri; middle row: Don Koonce, Rodney Rocha; left back: Delicia Slaughter, Sue Leibert, Jim Wade, Gregory Vogt, Steve Rickman, and Tom Deibel.



**ENGINEERS**  
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FEBRUARY 20-26, 2000

It really gets the kids thinking."

"I take various hardware artifacts and posters with me to the schools as talking points to focus students' attention and to help them understand the space environment and how engineers have to design specifically for it," said Norm Chaffee, a retired JSC engineer.

"I love it when I see the 'light bulbs' go on in a student's face as he or she understands a concept like microgravity, or the laws of motion."

Rodney Rocha, a JSC aerospace engineer and a National Engineers Week volunteer since the program began in 1991, explains to students the new sets of technological and social challenges they will face. "I tell kids today that there is no avoiding science and engineering. Even

before they reach adulthood, science and engineering will come knocking loudly on their doors whether or not they become engineers or scientists. It won't just be in the form of new gadgets, computers, and cool technology to use as consumers. They will also be challenged as voters deciding on action or inaction in such areas as human genetic engineering and organ transplants, the world's oil supply, what science textbooks to allow in public schools, and what kind of space program is right or too expensive. To be informed and responsible citizens, they will need to recognize new scientific terms, phrases, theories and, yes, even math statistics as presented not only in scientific journals but in the news media."

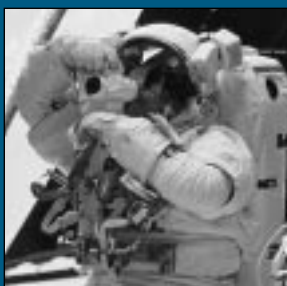
Volunteers are still needed to sign up for the remaining classroom assignments, which can be found online by visiting the National Engineers Week Web site at <http://www4.jsc.nasa.gov/scripts/eweek/>.

Volunteers are asked to commit to

giving classroom presentations to students that attend grades K-12 in schools within 50 miles of JSC during the month of February. For civil service employees, time spent participating as a National Engineers Week volunteer may be charged to the education labor code. Contractor employees need to check with their individual supervisor, human resource or payroll office for instructions on how to charge National Engineers Week volunteer time.

Other educational outreach activities that JSC will host to observe National Engineers Week include the Mars Millennium Project and the Mars Settlement Design Competition, both of which are coordinated by Norm Chaffee who can be reached at (281) 483-3777 for details.

With declining enrollment figures in the engineering fields, National Engineers Week offers a great opportunity for each of us to contribute to our community's technical education efforts. ■



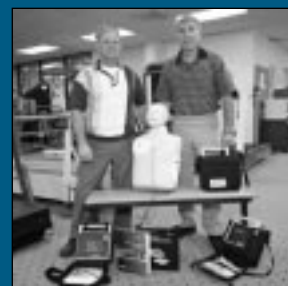
Spectacular new  
photos from  
space.

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Shine your boots  
and get ready  
for rodeo.

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Shocking news  
for the new  
millennium.

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